

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANT: Judith Schwabe et al.  
SERIAL NO.: Unassigned  
FILING DATE: Herewith  
TITLE: OPTIMIZATION OF N-BASE TYPED ARITHMETIC  
INSTRUCTIONS VIA REWORK  
EXAMINER: Unassigned  
ART UNIT: Unassigned

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**CERTIFICATE OF EXPRESS MAILING**

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Application P.O. Box 1450, Alexandria, VA 22313 on the date printed below:

Date: 11-12-03

Name: Carol Diez

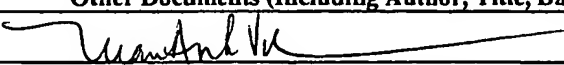
Carol Diez

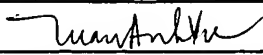
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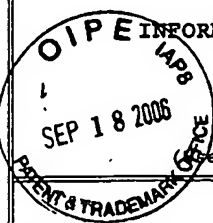
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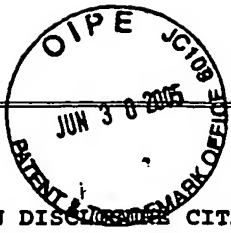
**INFORMATION DISCLOSURE STATEMENT**

Each item of information listed in the attached FORM PTO-1449, for which a copy of each is attached, may be material to the examination of the above-identified application and is, therefore, submitted in compliance with the duty of disclosure defined in 37 CFR §§ 1.56, 1.97 and 1.98. The Examiner is requested to make these items of official record in this application.

Form PTO 1449 (Rev. 2-32)				U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No. SUN-P4181		Serial No. Unassigned	
Information Disclosure Statement by Applicant						Applicant: Judith Schwabe et al.			
(Use several sheets if necessary)						Filed: Herewith		Group: Unassigned	
<b>U.S. Patent Documents</b>									
Init.		Document No.	Date	Name	Class	Subclass	Filing Date		
AT	A	5,408,670	4/18/95	Davies					
AT	B	4,400,769	8/23/93	Kaneda et al.					
	C	5,305,456	4/19/94	Boitana					
	D	5,740,441	4/14/98	Yellin et al.					
	E	5,784,553	7/21/98	Kolawa et al.					
	F	5,794,049	8/11/98	Lindholm					
	G	5,920,720	7/99	Toutonghi et al.					
	H	5,999,731	12/99	Yellin et al.					
	I	6,003,038	12/99	Chen					
	J	6,026,237	2/00	Berry et al.					
	K	6,075,863	6/00	Krishnan et al.					
	L	6,093,216	7/00	Adi-Tabatabai et al.					
	M	6,477,702	11/5/02	Yellin et al.					
	N	6,308,317	10/23/01	Wilkinson et al.					
	O	5,446,901	8/29/95	Owicki et al.					
	P	5,884,316	3/16/99	Bernstein et al.					
	Q	6,182,158	1/30/01	Kougiouris et al.					
	R	6,212,633	4/3/01	Levy et al.					
	S	5,668,999	9/16/97	Gosling					
	T	5,732,263	3/24/98	Havens et al.					
	U	6,092,147	7/18/00	Levy et al.					
	V	3,805,045	4/16/74	Larsen					
	W	3,993,891	11/23/76	Beck et al.					
	X	4,504,924	3/12/85	Cook et al.					
✓	Y	5,497,340	3/5/96	Uramoto et al.					
AT	Z	5,606,677	2/25/97	Balmer et al.					
AT	AA	5,724,279	3/3/98	Benaloh et al.					
<b>Foreign Documents</b>									
								Translation	
Init.		Document No.	Date	Country	Class	Subclass	Yes	No	
<b>Other Documents (Including Author, Title, Date, Pertinent Pages, etc.)</b>									
Examiner 					Date Considered 10-28-06				
Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.									

Form PTO 1449 (Rev. 2-32)				U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No. SUN-P4181		Serial No. Unassigned	
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<b>Foreign Documents</b>									
								Translation	
Init.		Document No.	Date	Country	Class	Subclass	Yes	No	
AA	BB	EP 0 778 522 A2	6/11/97	Europe			X		
AA	CC	WO 01/14958	3/1/01	France			X		
<b>Other Documents (Including Author, Title, Date, Pertinent Pages, etc.)</b>									
AA	DD	Sun Microsystems, Inc., "Java Card™ 20. Developer's Guide, August 19, 1998, Revision 1.12.							
AA	EE	Sun Microsystems, Inc., "Java Card™ 2.0 Application Programming Interfaces", October 13, 1997, Rev. 1.0							
AA	FF	Sun Microsystems, Inc., "Java Card™ 2.0 Language Subset and Virtual Machine Specification", October 13, 1997, Revision 1.0 Final							
AA	GG	Sun Microsystems, Inc., "Java Card™ 2.0 Programming Concepts", October 15, 1997, Rev. 1.0 Final							
AA	HH	Sun Microsystems, Inc., "Java Card™ 2.1 Application Programming Interface", June 7, 1999, Final Rev. 1.1							
AA	II	Sun Microsystems, Inc., "Java Card™ 2.1 Runtime Environment (JCRE) Specification", June 7, 1999, Final Revision 1.1							
AA	JJ	Sun Microsystems, Inc., "Java Card™ 2.1 Virtual Machine Specification", June 7, 1999, Final Rev. 1.1							
AA	KK	Sun Microsystems, Inc., "Release Notes- Java Card™ 2.1 Specifications", June 7, 1999, Final Rev. 1.1							
AA	LL	Sun Microsystems, Inc., "Java Check™ 3.0 Frequently Asked Questions", printed from <a href="http://java.sun.com/products/personaljava/jcheckfaq30-beta.html">http://java.sun.com/products/personaljava/jcheckfaq30-beta.html</a> , on 12/3/99.							
AA	MM	Sun Microsystems, Inc., "Java Check™ Technical Notice", printed from <a href="http://java.sun.com/products/personaljava/JcheckTechNotice.html">http://java.sun.com/products/personaljava/JcheckTechNotice.html</a> , on 12/3/99.							
AA	NN	Sun Microsystems, Inc., "Using Java Check™", Version 2.0.1, printed from <a href="http://www.sun.com/software/personaljava/techinfo.html">www.sun.com/software/personaljava/techinfo.html</a> , on 12/3/99.							
AA	OO	Sun Microsystems, Inc., "Using Java Check™", Version 3.0, printed from <a href="http://java.sun.com/cgi-bin/download2.cgi">http://java.sun.com/cgi-bin/download2.cgi</a> , on 12/3/99.							
AA	PP	Sun Microsystems, Inc., "The K Virtual Machine (KVM)", White Paper 6/8/99							
AA	QQ	Ritchey, Tim, "Advanced Topics: The Java Virtual Machine" JAVA!, Chapter 14, pp. 25-346, Sept. 22, 1995							
AA	RR	Daniels, John et al., "Strategies For Sharing Objects In Distributed Systems", JOOP, Object Designers Ltd. UK, pp. 27-36							
AA	SS	Michael Shuttle et al., "Exact Rounding of Certain Elementary Functions", June 29, 1993, pp. 138-145							
AA	TT	Ziv, Abraham, "Fast Evaluation of Elementary Mathematical Functions with Correctly Rounded Last Bit", September 1, 1991, pp. 410-423							
AA	UU	George E. Necula et al., "Proof Carrying Code", November 1996, pp. 1-60							
Examiner						Date Considered			
						10-28-06			
Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.									

Form PTO-1449				Atty Docket No. P-4181CIP		Serial No. 10/712,463	
<div style="text-align: center;">  <p><b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b></p> <p>(Use several sheets if necessary)</p> </div>				Applicant(s) Judith E. Schwabe et al.			
				Filing Date November 12, 2003		Group 2124	
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
JST	AA	5,107,451	04/21/92	Houk	364	746	
JST	AB	5,825,407	10/20/98	Cowe et al.	348	6	
JST	AC	2003/0028572	02/06/03	Hoskote et al.	708	495	
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
<b>FOREIGN PATENT DOCUMENTS</b>							
							<b>Translation</b>
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES      NO
	AL						
	AM						
	AN						
	AO						
	AP						
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
JST	AR	Jags, "cs510jip Compressed Data Loader", Jags_report, May 21, 1998, pages 1-9, Retrieved online December 16, 2005 from URL: < <a href="http://www.cs.pdx.edu/~apt/cs510jip_1998/jags_report/report.html">http://www.cs.pdx.edu/~apt/cs510jip_1998/jags_report/report.html</a> >					
	AS						
	AT						
Examiner <i>mashtalva</i>		Date Considered <i>10-28-06</i>					
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).							



Form PTO-2449

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

Atty Docket No.

P-4181CIP

Serial No.

10/712,463

Applicant(s)

Judith E. Schwabe et al.

Filing Date

November 12, 2003

Group

2124

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AT	AA	6,151,618	11/21/2000	Wahbe et al.	718	1	
AT	AB	6,247,174	06/12/2001	Santhanam et al.	717	154	
AT	AC	6,363,523	03/26/2003	Chen et al.	717	153	
AT	AD	2002/0023954	02/28/2002	Calder et al.	235	381	
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

## FOREIGN PATENT DOCUMENTS

							Translation	
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
	AL							
	AM							
	AN							
	AO							
	AP							

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	
	AS	
	AT	

Examiner

*Wahbe*

Date Considered

10-28-06

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